WHAT IS CLAIMED IS:

1. A disc drive comprising:

a chassis;

at least one disc;

a spindle assembly rotationally supporting the at least one disc relative to the chassis to form a flow field along a surface of the at least one disc via rotation of the at least one disc;

a head assembly including a suspension supporting at least one head positionable proximate to the disc surface; and

a flow controller supported in the flow field along the disc surface and including a plurality of streamline flow passages to reduce turbulence in the flow field.

2. The disc drive of claim 1 wherein the flow controller is a flow gate supported upstream of flow of the flow field to the head assembly.

3. The disc drive of claim 1 wherein the flow controller is a flow gate supported downstream of flow of the flow field from the head assembly.

4. The disc drive of claim 1 wherein the flow controller includes a plurality of flow gates supported in the flow field along the disc surface of the at least one disc.

5. The disc drive of claim 4 wherein the plurality of flow gates includes an inflow gate to condition flow to the head assembly and an outflow gate to condition flow excited by the head assembly.

6. The disc drive of claim 1 wherein the plurality of flow passages include circumferential radially spaced flow passages.

7. The disc drive of claim 6 wherein the circumferential radially spaced flow passages are formed of a plurality of radially spaced circumferential fins supported relative to the at least one disc.

8. The disc drive of claim 1 wherein the flow controller includes a honeycomb structure forming the plurality of streamline flow passages.

9. The disc drive of claim 1 wherein the flow controller includes a block structure forming the plurality of streamline flow passages.

10. The disc drive of claim 1 wherein the flow controller includes an array of tubes forming the plurality of streamline flow passages.

11. The disc drive of claim 1 wherein the head assembly is pivotally supported to move between an inner position and an outer position and a width of the flow controller extends between the inner and outer positions of the head assembly to condition flow to the head assembly.

12. The disc drive of claim 1 wherein the spindle assembly supports a plurality of discs spaced to form a gap therebetween and including at least one flow controller supported in the gap between adjacent discs.

13. The disc drive of claim 12 including a plurality of flow controllers supported relative to the plurality of discs.

14. The disc drive of claim 1 wherein the streamline flow passages are angled between an inlet and an outlet of the flow passages to redirect the flow field.

15. The disc drive of claim 14 wherein the streamline flow passages are angled to direct the flow field inwardly toward an inner diameter of the at least one disc.

16. The disc drive of claim 14 wherein the streamline flow passages are angled to direct the flow field outwardly toward an outer diameter of the at least one disc.

17. A disc drive comprising:

at least one disc rotatable about a spindle axis and forming a flow field along a surface of the at least one disc and a head assembly supported relative to the surface of the at least one disc to read data from or write data to the at least one disc; and

means for controlling flow along the flow field for reducing turbulent flow along the surface of the at least one disc.

18. The disc drive of claim 16 wherein the means for controlling flow includes a flow gate including a plurality of streamline flow passages.

19. The disc drive of claim 17 wherein the flow gate is supported upstream of flow of the flow field to the head assembly.

20. The disc drive of claim 17 wherein the flow gate is supported downstream of flow of the flow field from the head assembly.

21. The disc drive of claim 16 wherein the means for controlling flow includes a plurality of radially spaced circumferential flow passages.

22. The disc drive of claim 16 wherein the means for controlling flow includes a plurality of streamlined angled flow passages.

23. In combination;

at least one disc supported by a spindle assembly rotationally coupled to a chassis and rotatable to induce a flow field along a surface of the disc by rotation of the at least one disc; and

a flow device supported in the flow field and including a plurality of streamline flow passages to reduce flow turbulence in the flow field.

24. The combination of claim 22 including a plurality of stacked discs supported by the spindle assembly and a plurality of flow devices supported relative to the stacked discs.

25. The combination of claim 22 and further comprising:

a head assembly supporting at least one head relative to the surface of the at least one disc and the flow device is a flow gate supported upstream of flow of the flow field to the head assembly.

26. The combination of claim 22 and further comprising:

a head assembly supporting at least one head relative to the surface of the at least one disc and the flow device is a flow gate supported downstream of flow of the flow field from the head assembly.

27. The combination of claim 22 wherein the plurality of flow passages include a plurality of radially spaced circumferential flow passages.

28. The combination of claim 22 wherein the streamline flow passages are angled to redirect the flow field.